



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **08215711 A**(43) Date of publication of application: **27.08.96**

(51) Int. Cl.

**B21B 3/02**  
**B21B 45/06**(21) Application number: **07028509**(22) Date of filing: **16.02.95**(71) Applicant: **NIPPON STEEL CORP**(72) Inventor: **TAKEUCHI JUN**  
**TAKEDA KOICHI**(54) **MANUFACTURE OF STAINLESS STEEL SHEET**

necessary, after executing passivating treatment.

(57) Abstract:

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**PURPOSE:** To reduce the removing cost of an oxidized film by applying vacuum- arc descaling method to remove the oxidized film on a stainless steel sheet after cold rolling and annealing treatment and treating in a short time at voltage and Coulomb density on a level with electrolytic pickling.

**CONSTITUTION:** For example, the stainless steel sheet 1 having the oxidized film of 30-300nm thick is fed into a vacuum-treating chamber which is kept at about 10Pa from an uncoiler 8, connected to the negative pole of a high-frequency arc power supply 5 through conductor rolls 11 and ignited. In this way, an arc current is made to flow from anodes 2 to the stainless steel sheet 1 and, by evaporation of cathod points which are formed on the surface of the stainless steel sheet 1, the oxidized film is removed. Usually, the arc voltage is taken as about 30V, the Coulomb density as about 8000e/m<sup>2</sup> when the thickness of the oxidized film is 100nm. After removing the oxidized film, the sheet is slightly reduced by skin-pass and, further, it is preferable to coil the sheet with a coiler 10, as

